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### REMARKS

In the foregoing amendment Claims 4 and 7 have been amended and Claims 2, 3, 5, 6 and 8-19 have been cancelled. Claims 4, 7, 20 and 21 are currently pending in this application. For the reasons set forth below, Applicant believes that the rejections should be withdrawn and that Claims 4, 7, 20 and 21 are in condition for allowance.

### REJECTION OF CLAIMS 2-9 and 17-21 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 2-9 and 17-21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,532,585 to Oudet *et al.* ("Oudet") in view of U.S. Pub. No. 2003/0137293 to Welsch *et al.* ("Welsch"). The Examiner has not established a prima facie case of obviousness. As discussed below, this rejection is respectfully traversed.

#### **CLAIMS 2, 3, 5, 6, 8, 9 and 17-19**

Claims 2, 3, 5, 6, 8, 9 and 17-19 have been cancelled. Accordingly, the rejection of these claims is now moot.

#### **CLAIMS 4 and CLAIMS 7**

Independent Claims 4 and 7 have been amended to clarify features of the assist stator. Claim 4 incorporates the elements of cancelled Claim 6, and Claim 7 incorporates the elements of cancelled Claim 9. More specifically, amended Claim 4 clarifies that "the assist stator has a pair of opposed walls corresponding to front and back faces of the part of the magnet that does not enter the area and a second gap continuing into the opposed walls of the assist stator." Amended Claim 7 clarifies that "the assist stator is partitioned through a third gap continuing into the opposed walls of the assist stator."

In the present application, by determining the presence of the gap Ga of the assist stator 141 (241) and adjusting a clearance of the gap Ga, it is possible to correct and alter output characteristics of the sensor. (Page 16, Lines 26-28; *see e.g.* Figs. 3(b) and 4(b)). According to an embodiment of the present invention, Figure 24 illustrates the relationship between the gap of the assist stator and the hysteresis. (Page 29, Lines 18-21). As shown in

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Figure 24, the broader the gap of the assist stator, the smaller the hysteresis in the range in parallel translation. (Page 29, Lines 18-24).

In rejecting Claim 4, the Examiner acknowledged that Oudet fails to show an assist stator for preventing magnetic flux, which is generated in a part of the magnet that does not enter the area, from leaking out to the main stator. Additionally, in rejecting Claim 7, the Examiner acknowledged that Oudet fails to show an assist stator arranged at a second gap intersecting with a moving direction of the slider from the main stator, the assist stator consisting of a magnetic body having a pair of opposed walls forming a second area allowing the slider to move while keeping a predetermined clearance. To support the rejection of the assist stator elements of Claims 4 and 7, the Examiner cited to conductance piece 2 of Welsch (Fig. 1).

Figure 1 of Welsch does not disclose or even suggest an assist stator having a gap that continues into opposed walls of the assist stator, as required by Claims 4 and 7. The conductance piece 2 has an opening that allows the magnet 6 to slide, but does not include a gap in opposed walls. None of the figures or corresponding sections of Welsch show otherwise. Oudet in combination with Welsch does not teach nor render obvious all features or elements of Claims 4 and 7. Accordingly, Claims 4 and 7 are patentable over Oudet in view of Welsch.

#### **CLAIMS 20 and 21**

Claim 20 depends from Claim 4, and Claim 21 depends from Claim 7. Accordingly, for at least the same reasons discussed above, Claims 20 and 21 are patentable over Oudet in view of Welsch.

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### CONCLUSION

The foregoing is submitted as a complete response to the Office Action identified above. This application should now be in condition for allowance, and Applicant solicits a notice to that effect. The Commissioner is authorized to charge any additional fees that may be due or credit any overpayment to Deposit Account No. 11-0855. If there are any issues that can be addressed via telephone, the Examiner is asked to contact the undersigned at 404.685.6799.

Respectfully submitted,

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